U.S.S.N.: 10/786,965

Filing Date: 2/25/2004

EMC Docket No.: EMC-02-132CIP1

In the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the

Application.

Listing of Claims:

Claims 1 - 21. (cancelled)

22. (New) A method of enabling a user to construct a target data storage system

the method comprising the steps of:

displaying a user interface to the user, the user interface connected to

the target data storage system, the target data storage system a plurality of storage components,

and one or more source data storage systems, each of the one or more source data storage

systems comprising a plurality of storage components;

the user interface including a selector to enable the user to select one or more data storage

components from the one or more source data storage systems for inclusion in the target data

storage system;

merging the selected one or more source data storage components from the one or more

source data storage systems into the target data storage system, including obtaining configuration

characteristics and workload characteristics for the one or more data storage components from

the one or more source data storage systems; wherein the workload characteristics comprise I/O

operations comprising a number of read hits, read misses, least recently used writes, and write

pending operations;

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simulating performance of the target data storage system using one or more workloads to

obtain utilization and performance information for the target storage system from the workload

characteristics of each data storage system component of the one or more data storage

components of the one or more source data storage systems; and

graphically representing the utilization or performance of each of the one or more data

storage components of the one or more source data storage systems merged into the target data

storage system and the data storage components in the target data storage system on the user

interface to enable the user to visually determine whether the target data storage system meets a

desired performance.

23. (New) The method of claim 22, wherein the workload characteristics are obtained from a

workload analyzer that analyzes the workload characteristics of the associated data storage

component when executing in the source storage system in response to the one or more

workloads.

24. (New) The method of claim 22, wherein the workload characteristics are input by the user.

25. (New) The method of 22 wherein the user consolidates the source data storage system by

constructing the target data storage system to include fewer data storage components than the

source data storage system.

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26. (New) The method of claim 22 wherein the target data storage system includes data storage

components of higher capacity than the source data storage system.

27. (New) The method of claim 26, wherein the target data storage system is configured to be

load balanced in accordance with information yielded from the step of simulating performance

on the target data storage systems.

28. (New) The method of claim 22 wherein a graphical representation of the utilization or

performance on the user interface visually indicates whether to consolidate a plurality of data

storage components of the source data storage system to fewer or newer data storage system

components.

29. (New) A system for simulating and displaying performance or utilization information of a

target data storage the data storage system includes:

a computer having a memory and a display;

computer-executable program code, operable when executed upon by a processor of the

system to:

display a user interface on the display, the user interface connected to the

target data storage system, to the target data storage system comprising a plurality

of storage components, and one or more source data storage systems, each of the

one or more data storage systems comprising one or more data storage

components;

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the user interface including a selector to enable a user to select a data

storage component from the one or more source data storage systems for inclusion

in the target data storage system;

merge the selected one or more source data storage component from the one or more data

storage systems into the target data storage system, including obtaining configuration

characteristics and workload characteristics for the one or more data storage components

from the one or more source data storage systems; wherein the workload characteristics

comprise I/O operations comprising a number of read hits, read misses, least recently

used writes, and write pending operations;

simulate performance of the target data storage system using one or more

workloads to obtain utilization and performance information for

storage system from the workload characteristics of each data storage

components; and

graphically represent the utilization or performance of each of the one or

more data storage components of the one ore more source data storage systems

merged into the target data storage system and the data storage components in the

target data storage system on the user interface to enable the user to visually

determine whether the target data storage system meets a desired performance.

30. (New) The system of claim 29, wherein the workload characteristics are obtained from a

workload analyzer that analyzes the workload characteristics of the associated data storage

component when executing in a source storage system in response to the one or more workloads.

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31. (New) The system of claim 29 workload characteristics are input by the user.

32. (New) The system of claim 29, wherein the user consolidates a source data storage system

by constructing the target data storage system to include fewer data storage components than the

source data storage system.

32. (New) The system of claim 29, wherein the target data storage system includes data storage

components of higher capacity than the source data storage system.

33. (New) The system of claim 32, wherein the target data storage system is configured to be

load balanced in accordance with information yielded from the step of simulating performance

on target data storage systems.

34. (New) The system of claim 33, wherein the target data storage system is configured to be

optimized for performance in accordance with information yielded from the step of simulating

performance on the target data storage systems.

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